

Date: Mon, 4 Oct 93 04:30:20 PDT  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V93 #64  
To: Ham-Homebrew

Ham-Homebrew Digest                      Mon, 4 Oct 93                      Volume 93 : Issue    64

Today's Topics:

aaaaaaaaarrrrrgggghhhh!  
AM Stereo Add-in Possibi  
Butterworth Filters  
Voltage for delay relay?  
Where do you get a 2N269

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: Sun, 3 Oct 1993 03:50:51 GMT  
From: sdd.hp.com!nigel.msen.com!yale.edu!xlink.net!howland.reston.ans.net!  
spool.mu.edu!wupost!csus.edu!netcom.com!wa2ise@network.ucsd.edu  
Subject: aaaaaaaarrrrrgggghhhh!  
To: ham-homebrew@ucsd.edu

>I solder the new jack to the end of the cord. Beautiful job. Never done  
> better.  
>Then I discover that I forgot to slip the little cover that is supposed to get  
>put over the connections onto the cord first. Why can't I remember?

Think it might be a requirement by the FCC that every ham must make this  
mistake at least once in his career.                      :-)

-----  
Date: Sat, 02 Oct 1993 12:52:02 -0600  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!spool.mu.edu!umn.edu!uum1!

kksys.com!edgar!tdkt!FredGate@network.ucsd.edu  
Subject: AM Stereo Add-in Possibi  
To: ham-homebrew@ucsd.edu

On 09-28-93, Joseph Jesson wrote to All:

>-----

The point was I tested the new super Denon unit next to the Lowe 150 with AM sysnc detector - no contest, the Lowe has a MUCH better RF section, but NO stereo! I can add a board to demodulate AM stereo...

--

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Joseph Jesson   joe@netcom.com   Day (312) 856-3645   Eve (708) 356-6817  
21414 W. Honey Lane, Lake Villa, IL, 60046  
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>-----

Fascinating project, but why bother? AM stereo is having a hard time getting off the ground, along with AM broadcasting in general. A solid RF section, with perhaps some bandwidth options for audio quality vs. QRM reduction, are all you need.

John K0JD

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\* Freddie 1.2.5 \* J.S. Bach of Borg: "Your style will be assimilated"

\* Origin: Dark Knight's Table (1:282/31)

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Date: Sat, 02 Oct 93 19:54:24 CDT  
From: sdd.hp.com!spool.mu.edu!agate!iat.holonet.net!vulcan!gary@network.ucsd.edu  
Subject: Butterworth Filters  
To: ham-homebrew@ucsd.edu

ilikecpu@nevada.edu (BARRIE HIERN) writes:

>

> Hello all,

>

> Are there any electronic math wizards out there that can help me find an  
> equation that when given the number of elements N, a cutoff freq., and  
> the source and load Z's the equation will determine the L and C values

> for a low pass Butterworth Filter ????

>

> Any and all information regarding Butterworth mathematics will be appreciated

>

> Thanks,

> Barrie

>

Unfortunately, there isn't a single equation, as far as I know. This is a multi-step process. There are a number of good programs on the market that do this...but if you are interested in the math, a fairly modern reference that I recommend is:

Electrical Networks and Filters  
author = G. H. Tomlinson  
publisher = Prentice Hall  
ISBN 0-13-248261-4

Generally, one transforms the problem into a low-pass filter, then finds the poles, then transforms the problem back to a bandpass or highpass (if needed), then does impedance scaling, and then synthesizes the required network to implement the desired transfer function.

Good Luck

--

Gary Tennyson      BellSouth Telecommunications, Inc.

Internet:            gary@vulcan.com

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Date: Fri, 01 Oct 93 14:47:41 GMT  
From: netcon!bongo!skyld!janguus@locus.ucla.edu  
Subject: Voltage for delay relay?  
To: ham-homebrew@ucsd.edu

In article <16C57BEE4.STRICK@UGA.CC.UGA.EDU> STRICK@UGA.CC.UGA.EDU writes:

>

> I recently picked up an Amperite Delay Relay with identification on

> the box and glass body of "6N015". Box says: Heater: Prongs 2-3,

> Relay: Prongs 5-7. I know I can start with a low voltage and work

> my way up trial-n-error, but does anyone have the specs for the

> heater voltage on this little gem? Thanks.

That's 6N015, 6.3 VAC fillament, Normally Open and 15 second delay.  
Sounds like just the part for keeping the B+ from turning on before

the rest of the tubes heat up sufficiently (typical 11 second warm up time).

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA		"It is difficult to imagine our
Internet: jangus@skyld.tele.com		universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749		potent god. I see it more as a
Phone: 1 (310) 324-6080		badly run corporation."

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Date: Sat, 02 Oct 1993 12:33:00 -0600  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!sol.ctr.columbia.edu!  
news.kei.com!yeshua.marcam.com!zip.eecs.umich.edu!umn.edu!uum1!kksys.com!edgar!  
tdkt!FredGate@network.ucsd.edu  
Subject: Where do you get a 2N269  
To: ham-homebrew@ucsd.edu

On 09-24-93, Dana Myers wrote to All:

>-----  
Where did you find these transistors? The number is extremely old, and  
I don't know where to find them.

---  
\* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are \*  
\* (310) 348-6043 | mine and do not necessarily \*  
\* Dana.Myers@West.Sun.Com | reflect those of my employer \*  
\* This Extra supports the abolition of the 13 and 20 WPM tests \*

>-----  
No doubt you have to resort to the NTE, ECG, etc. replacement  
semiconductor line. The 2N269 is cross-referenced to an NTE160 -- a  
germanium PNP device!

But why bother? For an 80m circuit, there are plenty of similar circuits  
using standard 2N2222 class devices. Check out Doug DeMaw's "QRP  
Notebook" from ARRL, for example. Unless, like the antique radio  
afficionados, you want to "get historic..."

John K0JD

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\* Freddie 1.2.5 \* J.S. Bach of Borg: "Your style will be assimilated"

\* Origin: Dark Knight's Table (1:282/31)

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Date: 3 Oct 1993 21:22:59 +0200  
From: sdd.hp.com!swrinde!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!pipex!  
sunic!osiris.kbfi.ee!osiris.kbfi.ee!@network.ucsd.edu  
To: ham-homebrew@ucsd.edu

References <28ae3u\$48p@hpsc.it.sc.hp.com>, <28ag3e\$h39@newscast.west.sun.com>,  
<28ajfp\$aqe@hpsc.it.sc.hp.com>osiris.k  
Subject : Re: Anyone interested in discussing PLL synt

Thanks for the interesting details.  
For those not directly involved, could you briefly explain  
the difference between the Tri-State phase comparator  
and the sample/hold phase comparator. References will  
also be greatly appreciated.

Ylo Mets      ylo@osiris.kbfi.ee

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End of Ham-Homebrew Digest V93 #64  
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